



Course Description

Science of Disaster (L-102)

Description:

This course provides the participants with an overview of scientific principles and concepts that shape our increasingly dangerous world. The contents of the course include an introduction to Science of Disaster provides a definition and benefits of science; how Earth Science describes the Earth's design sets the stage for the world's natural hazards including earthquakes, volcanic, eruptions, tsunamis, and landslides/sinkholes; how Climatology describes the scientific basis of common atmospheric hazards including convective storms, tropical cyclones, and other hazardous weather; how chemical and biological basics identifies the scientific basis of chemical and biological threats; and how explosive, radiological, and nuclear fundamentals identifies the scientific basis of those threats.

Course Objectives:

At the end of this course, participants will be able to:

- Indicate how earth science principles and processes influence natural hazards, including earthquakes, volcanic eruptions, tsunamis, ground failures, and floods.
- Indicate how climatological principles and processes influence natural hazards, including convective storms, tropical cyclones, nor'easters, winter storms, temperature extremes, and droughts.
- Indicate how chemical and biological principles and processes influence natural and human-caused hazards and impact society.
- Indicate the scientific basis for explosive, radiological, and nuclear hazards and their impact on society.
- Indicate how scientific understanding can improve emergency preparedness.

Recommended Prerequisites:

- IS 0100.b, Introduction to the Incident Command System
- ICS 120.a., An Introduction to Exercise
- IS 0200.b., ICS for Single Resources and Initial Action Incidents
- IS0230.d, Fundamentals of Emergency Management
- IS 0700.a, National Incident Management System, An Introduction
- IS 0800.b, National Response Framework, An Introduction

All participants must have a FEMA Student Identification (FEMA SID) number. Students can search for their existing or create a new FEMA SID at: <https://cdp.dhs.gov/femasid/>.

Length: 24 hrs

Target Audience:

- Emergency managers (less than three years of experience)
- Members of state/local/tribal/territorial homeland security or emergency services programs
- Non-governmental organizations, voluntary agencies, or professional organizations
- Private sector emergency management offices
- Emergency Management roles at colleges/universities
- Federal partners, military and emergency managers at other departments or agencies

Cost:

There is no fee for the course. Other cost considerations are detailed in each LMS course offering.

Signup Details:

Register through the New York State DHSES Learning Management System. Access the LMS through the link on the calendar webpage.